

WHAT IS CLAIMED IS:

1. A manufacturing method of a speaker comprising; a magnetic circuit including a magnet, pot yoke and a pole piece; a frame; a spider; a bobbin having a voice coil wound therearound; a diaphragm; a surround; terminals; and tinsel leads interconnecting the voice coil and the terminals, wherein ultrasonic complex vibration welding is applied to:

a process of fixedly putting together the magnet, the pot yoke and the pole piece;

a process of fixing, to an inner circumference of the frame, an outer periphery of the spider, which has its periphery fixed to the bobbin;

a process of fixing, to the frame, an outer circumferential edge of the surround, which has its inner circumferential edge fixed to an outer periphery of the diaphragm whose inner periphery is fixed to the bobbin; and

a process of fixedly connecting both ends of each of the tinsel leads respectively to terminations of the voice coil and to the terminals.

2. A manufacturing method according to Claim 1, wherein the ultrasonic complex vibration welding is implemented such that respective opposing inward surfaces of two components to be fixed together are brought into contact with each other and positioned relative to each other, and then that ultrasonic vibrations oriented in different directions are simultaneously provided to the inward surfaces while a load is applied to one of outward surfaces defined by the two components in a direction vertical to the inward surfaces.

3. A speaker produced by the manufacturing method according to Claim 1 or 2.